Return to Benoit

WING

AREA	SQ FT	540
ASPECT RATIO		7.0
TAPER RATIO		.30
SPAN EXTENDED	FT-IN	61.5-(738)
SPAN SWEPT	FT-IN	36.6-(439)
SWEEP-LEADING EDGE		
TAKEOFF/LANDING	DEGREE	20
CRUISE	DEGREE	26
COMBAT	DEGREE	38.5
SUPERSONIC COMBAT	DEGREE	70
ROOT CHORD	FT-IN	13.5-(162)
TIP CHORD	FT-IN	4.05-(48.6)
M.A.C.	FT-IN	9.63-(115.6)
AIRFOIL SECTIONS		
B.L. 93 (PIVOT)	NACA	64A 411
TIP	NACA	64A 409
INCIDENCE-WING EXTENDED		
B.L. 93 (PIVOT)	DEGREE	+3°-30'
TIP	DEGREE	-2°-30'
INCIDENCE-WING FULLY SWEPT		
B.L. 93 (PIVOT)	DEGREE	-1°-0'
TIP	DEGREE	-3°-5'
DIHEDRAL-WING EXTENDED-IN CHORD PLANE-ALONG A FUS. STATION THRU PIVOT	DEGREE	0°-0'
DIHEDRAL ALONG LEADING EDGE	DEGREE	1°-20'

WING REFERENCE POINT (PIVOT)-30% C/D AND 25.2 % OF SEMI SPAN

LEADING EDGE SLATS

3 PER WING

AREA (TOTAL STOWED)	SQ FT	46.5
SPAN	FT-IN.	38.25-(459)
ROOT CHORD	FT-IN.	1.58-(19.0)
TIP CHORD	FT-IN.	0.88-(10.5)
DEFLECTION		
1 & 2 INBOARD	DEGREE	50
3 OUTBOARD	DEGREE	45

SPOILERS

TYPE-FLAP 3 PER WING

AREA (AFT OF HINGE LINE)	SQ FT	53.44
SPAN	FT-IN.	35.7-(428)
ROOT CHORD	FT-IN.	1.7-(20.4)
TIP CHORD	FT-IN.	0.76-(9.1)
DEFLECTION	DEGREE	55
HINGE LINE (% OF WING CHORD)		61.1

FLAPS

TYPE-DOUBLE SLOTTED
NUMBER-4 PER WING

AREA	SQ FT	120
SPAN	FT-IN.	44.8(538)
ROOT CHORD	FT-IN.	3.83-(46)
TIP CHORD	FT-IN.	1.54-(18.5)
DEFLECTION (MAX)	DEGREE	30
HINGE LINE (% OF WING CHORD)		74

VERTICAL TAIL

AREA	SQ FT	140
ASPECT RATIO		1.117
TAPER RATIO		.315
SPAN	FT-IN	12.42-(149)
SWEEP-LEADING EDGE	DEGREE	43.25
ROOT CHORD	FT-IN.	17.12-(205.75)
TIP CHORD	FT-IN.	5.44-(65.25)
M.A.C.	FT-IN.	12.33-(148)
LOCATION: W.L. 287.5-STA 769 (.25 c)		
AIRFOIL SECTION		
0 TO 20 & 60 TO 100 % CHD		BICONVEX
20 TO 60 % CHD		SLAB
THICKNESS (ROOT/TIP)	PERCENT	5 / 4
FOLD HINGE LINE @ W.L. 270		

RUDDER

AREA	SQ FT	27
SPAN	FT-IN.	7.82-(93.75)
ROOT CHORD	FT-IN.	4.75-(57.0)
TIP CHORD	FT-IN.	2.165-(26.0)
DEFLECTION (L/R)	DEGREE	30
HINGE LINE (% OF CHORD)		65

SPEED BRAKES

AREA (STOWED)	SQ FT	23.6 EACH
AREA (PROJECTED-LOOK'G AFT)	SQ FT.	19.2 EACH
DEFLECTION	DEGREE	60

HINGE LINE LOCATION:
SWEPT FWD 20° FROM F.S. 807 & W.L. 224

HORIZONTAL TAIL

AREA (MOVABLE)	SQ FT	150
ASPECT RATIO (MOVABLE)		2.24
TAPER RATIO		.38
SPAN (TOTAL)	FT-IN.	30-(360)
(MOVABLE)	FT-IN.	18.3-(220)
SWEEP-LEADING EDGE	DEGREE	53
ROOT CHORD	FT-IN.	13.67-(164)
TIP CHORD	FT-IN.	5.24-(62.88)
M.A.C.	FT-IN.	10.04-(120.5)
LOCATION: W.L. 194.5-F.S. 780 @ .25 c		
AIRFOIL SECTION		BICONVEX
THICKNESS (ROOT/TIP)	PERCENT	5 / 3
INCIDENCE	DEGREE	0
DIHEDRAL	DEGREE	0
DEFLECTION	DEGREE	+15 -30

GLOVE HIGH LIFT DEVICES

MAIN LANDING GEAR FAIRING FLAP

AREA	SQ FT	13.8
SPAN	FT-IN	4.42-(53.0)
ROOT CHORD	FT-IN	3.0-(36.0)
TIP CHORD	FT-IN	3.25-(39.0)
DEFLECTION (MAX)	DEGREE	30
HINGE LINE (% OF CHORD)		71.5 (AVE)

FLAP - (GLOVE L.E.-

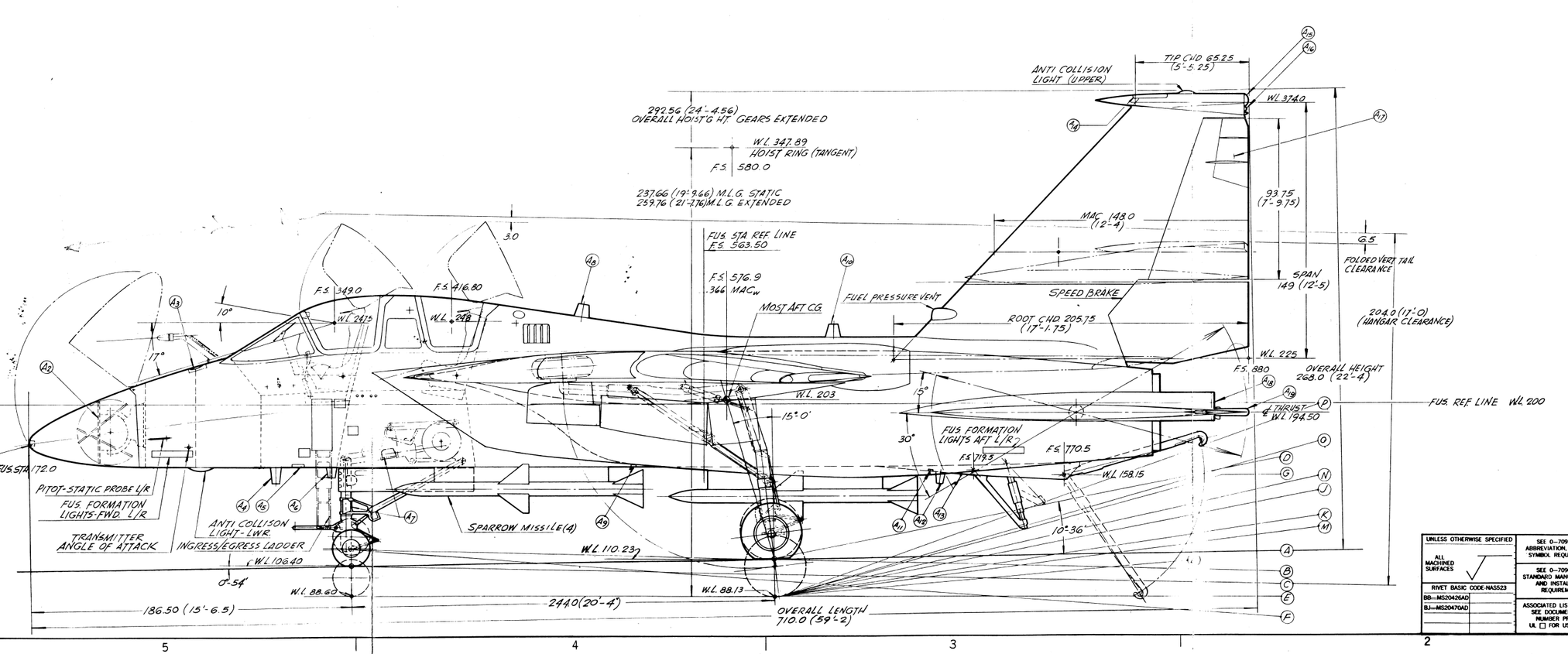
AREA	SQ FT	6.22 EA.
LENGTH (ALONG GLOVE L.E)	FT-IN	4.72 (56.5)
CHORD-INBOARD	FT-IN.	1.0 (12)
CHORD-OUTBOARD	FT-IN.	1.58 (19)
DEFLECTION	DEGREE	25

GROUND LINES

	ANGLE WITH FUS. REF. LINE
(A) STATIC GROUND LINE @ T.O.G.W.	0° - 54'
(B) NOSE GEAR FULLY COMPRESSED TIRES FLAT-MAIN GEAR IN NORMAL STATIC POS.	1° - 30'
(C) STATIC GROUND LINE @ MIN. FLYING W.T. WITH MAIN GEAR ON 6" SILL, NOSE GEAR IN NORMAL STATIC POSITION.	1° - 10'
(D) MAX TAIL DOWN, MAIN & NOSE GEAR IN NORMAL STATIC POSITION, TAIL SKID FULLY COMPRESSED.	11°-30'
(E) NOSE & MAIN GEAR FULLY EXTENDED	0° - 7'
(F) NOSE GEAR FULLY COMPRESSED, TIRES FLAT, MAIN GEAR EXTENDED 50% FROM STATIC, TIRES UNDEFLECTED	4°-50'
(G) MAX. TAIL DOWN, MAIN GEAR FULLY EXTENDED, TAIL SKID FULLY EXTENDED	15°-25'

DIRECT LIFT CONTROL & OUT OF GROUND EFFECT

(J) 1.0 V_{PA} MIN.	11°-0'
(K) 1.1 V_{PA} MIN.	8°-30'
(L) 1.3 V_{PA} MIN.	4°-54'
(M) .50 C_L MAX.	7°-12'
(N) .75 C_L MAX.	12°-30'
(O) .90 C_L MAX.	16°-0'
(P) C_L MAX.	19°-30'



INCHES 36 24 12 0 FEET 1 2 3 4 5 10

SCALE

UNLESS OTHERWISE SPECIFIED: ALL MACHINED SURFACES ✓	SEE 0-70914 FOR ABBREVIATION, CODE AND SYMBOL REQUIREMENTS	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	CHECK
	SEE 0-70902 FOR STANDARD MANUFACTURING AND INSTALLATION REQUIREMENTS	TOLERANCES X ±.1 XX ±.03 XXX ±.010 ANGULAR PER 0-70902	STRESS
RIVET BASIC CODE-NAS523			GR. ENGR. 7-14-68
BB—MS20426AD	ASSOCIATED LIST REQUIRED SEE DOCUMENT SAME NUMBER PREFIXED UL ☐ FOR USAGE LIST		DESIGN 7-14-68
BJ—MS20470AD			DRAWING 7-14-68
		MATL	CONTRACT NO.
		PROD. ENGR	7-14-68

SECURITY CLASSIFICATION

CONVAIR DIVISION OF GENERAL DYNAMICS
SAN DIEGO, CALIFORNIA

GENERAL ARRANGEMENT-ENG'R DATA - VFX CONVAIR MODEL 44

SIZE	CODE IDENT	DRAWING NO.
J	14170	44-01094

SCALE 1/20 | RELEASED | SHEET 1 OF 1

PACKAGE NO. | DOC | DISTR | FORM 6007